

### AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the present application.

#### Listing of Claims:

1. (Currently Amended) ~~[[A]]~~ An isolated peptide capable of being a diagnostic marker for Alzheimer's disease, the isolated peptide being obtained by cleaving an N-terminal ~~region and~~ region and a C-terminal region of Alcadein  $\alpha$ , ~~Alcadein  $\beta$ , or Alcadein  $\gamma$~~  wherein Alcadein  $\alpha$  is represented by SEQ ID NO: 1.

2. (Currently Amended) The isolated peptide according to claim 1, wherein the N-terminal ~~region to~~ region to be cleaved is a portion of an extracellular domain at the N-terminal region between amino acids 815 and 816, amino acids 820 and 821, or amino acids 838 and 839 of the amino acid sequence represented by SEQ ID NO: 1.

3. (Currently Amended) The isolated peptide according to claim 1, wherein the C-terminal ~~region is~~ region is cleaved by presenilin between amino acids 842 and 843, amino acids 843 and 844, or amino acids 851 and 852 of the amino acid sequence represented by SEQ ID NO: 1.

4. (Currently Amended) The isolated peptide according to claim 1, wherein the peptide is obtained by cleaving an N-terminal and a C-terminal regions of Alcadein  $\alpha$ ; ~~[[and]]~~ wherein the cleavage site of the N-terminal ~~region is~~ region is between amino acids 815 and 816, amino acids 820 and 821, or amino acids 838 and 839 ~~of the amino acid sequence represented by SEQ ID~~

NO: 1 and the cleavage site of the C-terminal region is between amino acids 842 and 843, amino acids 843 and 844, or amino acids 851 and 852 of SEQ ID NO: 1.

5. (Cancelled)

6. (Currently Amended) The isolated peptide according to claim 1, the peptide consisting of an amino acid sequence represented by any one of SEQ ID NOS: 4 to 12.

7-9. (Cancelled)

10. (Currently Amended) A method for diagnosing Alzheimer's disease, ~~the method comprising: a process of detecting or quantitatively~~  
obtaining a sample of body fluid or tissues taken from a subject,  
determining quantitatively the amount of the peptide according to claim 1 ~~in body fluid or tissues taken from an animal~~ present in said sample,  
wherein Alzheimer's disease is indicated when the amount of said peptide is greater than the amount of said peptide present in a control non-Alzheimer's disease sample.

11. (Currently Amended) The method ~~for diagnosing Alzheimer's disease~~ according to claim 10, wherein said sample of ~~[[the]]~~ body fluid is blood or cerebrospinal fluid.

12. (Currently Amended) The method ~~for diagnosing Alzheimer's disease~~ according to claim 10, wherein the ratio of a high-molecular-weight peptide to the ~~detected or~~ quantitatively determined peptide is used as an indicator for diagnosing Alzheimer's disease, wherein said high-molecular-weight peptide is a peptide which is obtained when the cleavage site of an N-terminal region is closer to the N-terminal end, or the cleavage site of a C-terminal region is closer to the C-terminal end, or a combination of both.

13. (Currently Amended) A method for screening a therapeutic agent for Alzheimer's disease, ~~the method comprising the steps of~~

contacting cells ~~secreting~~ containing the isolated peptide according to claim 1 with an agent to be screened; and

determining a change in the ~~secreted~~ amount of the peptide or a change in ~~[[the]]~~ a molecular species of the ~~secreted~~ peptide, wherein

said molecular species is a high-molecular-weight peptide which is a peptide which is obtained when the cleavage site of an N-terminal region is closer to the N-terminal end, or the cleavage site of a C-terminal region is closer to the C-terminal end, or a combination of both;

said change in the amount of the peptide is a decrease in the amount of the peptide caused by said agent to be screened is observed; and

said change in the molecular species of the peptide is a change from a high-molecular-weight peptide to a low-molecular-weight peptide is caused by said agent to be screened is observed.

14. (Withdrawn) An antibody against the peptide according to claim 1.
15. (Withdrawn) A diagnostic reagent for Alzheimer's disease, the reagent comprising the antibody according to claim 14.
16. (New) The method according to claim 10, wherein said sample is brain tissue.